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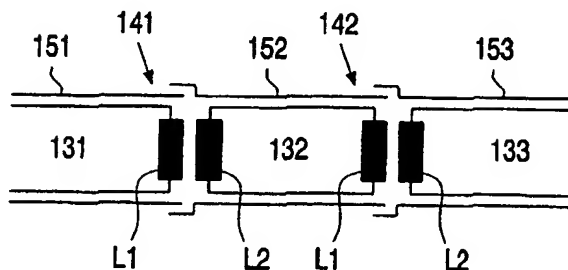
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(54) Title: CONNECTION LEAD FOR AN ELECTRICAL ACCESSORY DEVICE OF AN MRI SYSTEM



(57) Abstract: A magnetic resonance imaging apparatus is provided with one or more electrical accessory devices, for example, catheters (10) or RF body coils (6), which are intended for use during the examination of an object, as well as with a connection lead (13) which is arranged so as to extend through an examination zone (1) of the magnetic resonance imaging apparatus, which zone can be exposed to an RF field, and to connect the accessory device to a connection unit (12). In order to avoid heating of the connection lead (13) due to currents induced in the connection lead by the RF field, which currents could lead to injury of a patient or damage of the accessory device or the connection unit (12),

the connection lead (13) comprises at least one lead segment (131, 132, ...) which has a length which is limited by at least one inductive coupling element, e.g. a transformer (141, 142, ...; 161, 162, ...) and is unequal to  $n\lambda/2$ , where  $\lambda$  denotes the RF wavelength and  $n = 1, 2, 3, \dots$